

# African-American breast cancer survivors face higher risk of heart failure

March 7 2013

---

African-American women who survive breast cancer are more likely to develop heart failure than other women who have beaten the disease, according to research being presented at the American College of Cardiology's 62nd Annual Scientific Session.

All told, these women have a 1.4-fold greater risk for heart failure compared to their white counterparts, though the likelihood of dying after developing heart failure is roughly the same. This trend remained even after taking other potential contributing factors into account, including age, [high blood pressure](#), diabetes and use of [chemotherapy agents](#) or cardioprotective medications.

Researchers at Cleveland Clinic and Case Western Reserve University at MetroHealth in Cleveland said these findings could have important implications for the nearly 27,000 new cases of breast cancer each year among African-American women who may be at risk for subsequent heart failure.

"In general, African-American women are more susceptible to heart problems as they are disproportionately affected by high blood pressure, obesity, diabetes, high oxidative stress and even [vitamin D deficiency](#)," said Anna Valina-Toth, MD, PhD, a second-year internal medicine resident at Case Western Reserve University at MetroHealth and the study's lead investigator. "Our findings suggest that these women may require closer monitoring to detect the risk of heart failure earlier." This is the first study to establish how often heart failure occurs in a large,

representative U.S. sample of [breast cancer survivors](#), according to researchers. Heart failure is a chronic condition in which the heart can no longer pump enough blood to the body.

About half of people who have heart failure die within five years of diagnosis, according to the [Centers for Disease Control and Prevention](#). One reason for the heightened risk of heart failure among breast cancer patients is the use of [anthracycline](#) and trastuzumab, two of the most effective chemotherapy treatments available. These agents can damage the heart depending on the amount a patient receives over the course of treatment. Dr. Valina-Toth said certain medications called cardioprotective drugs might help prevent this damage and merit investigation. "Given the risk of chemotherapy-induced cardiotoxicity with both anthracycline and trastuzumab, pretreatment with cardioprotective agents such as ACE inhibitors or angiotensin II receptor blockers and beta blockers, in addition to monitoring cardiac function, need to be considered prior to initiation of chemotherapy," Dr. Valina-Toth said.

Researchers identified 26,347 women with breast cancer between 1973 and 2007 using the U.S. Surveillance Epidemiology and End Results (SEER) cancer registries that are matched to Medicare data with recorded heart failure diagnoses. Of these, 16 percent were later diagnosed with heart failure, with African-Americans having the highest heart failure occurrence of 21 percent compared to 16 percent of whites, 13 percent of Hispanics, 12 percent of Asians, and 11 percent of others including Native Americans. Most of the women, 82 percent, were age 65 or older. Authors say this is an important line of inquiry given that one out of eight American women will be diagnosed with [breast cancer](#) in her lifetime. Future lines of inquiry should evaluate whether non-invasive cardiac imaging and pretreatment with cardioprotective drugs prior to initiation of anthracyclines and trastuzumab-based chemotherapy would significantly reduce the risk of heart failure in [breast cancer](#)

[patients](#), especially in African-Americans who are predisposed to developing [heart failure](#).

**More information:** Dr. Valina-Toth will present the study "African American Race is a Correlate of Heart Failure in Breast Cancer Survivors: A study of 26,347 women identified with breast cancer from 1973-2007" on Saturday, March 9 at 10:00 a.m., in Moscone Center, Expo North.

Provided by American College of Cardiology

Citation: African-American breast cancer survivors face higher risk of heart failure (2013, March 7) retrieved 4 May 2024 from <https://medicalxpress.com/news/2013-03-african-american-breast-cancer-survivors-higher.html>

<p>This document is subject to copyright. Apart from any fair dealing for the purpose of private study or research, no part may be reproduced without the written permission. The content is provided for information purposes only.</p>
--